

ABSTRACT OF THE DISCLOSURE

A wireless communication IC exchanges data with an external device by receiving a radio signal having a given carrier frequency as power supply from the external device through an antenna. The wireless communication IC includes a capacitor for storing electric power, a diode placed between one end of the antenna and the capacitor, for supplying a charge current of the radio signal to the capacitor on a half cycle of the received radio signal; and a load modulation circuit. The load modulation circuit is driven by receiving power supply from the capacitor on another half cycle of the radio signal different from a half cycle for supplying a charge current to the capacitor.